



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/576,232

07/14/2006

Mitsuhiro Hamashima

URBA:004

7091

37013 7590 12/24/2008
ROSSI, KIMMS & McDOWELL LLP.
20609 Gordon Park Square, Suite 150
Ashburn, VA 20147

EXAMINER

CHACKO, SUNIL

ART UNIT

PAPER NUMBER

4146

MAIL DATE

DELIVERY MODE

12/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/576,232	HAMASHIMA ET AL.	
	Examiner	Art Unit	
	SUNIL CHACKO	4146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 28 & 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☒ Claim(s) 2-5, 7-10, 14-18, 20, & 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/8/2008; 8/14/2008; 6/04/2008; 5/16/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-43 are presented for examination; claims 28 & 29 have been cancelled by the applicant.
2. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) is acknowledged.
3. The information disclosure statement (IDS) submitted on May 16, 2007; June 4, 2008, August 4, 2008, September 8, 2008. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

4. Claims 2-5, 7-10, 14-18, 20, & 21 are objected to because of the following informalities: The use of language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure, See MPEP Section 2106 Patent Subject Matter Eligibility. Please refrain from the use of "*adapted to*", "*adapted for*", "*whereby*" and "***wherein***" clauses in the above stated claims. Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Art Unit: 4146

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 30-36 are rejected due to the fact that a *computer program* is not on of the Statutory Categories. Please see MPEP 2106.01 Computer-related Nonstatutory Subject Matter.

As to Claim 30:

- *A program which causes a computer to function as the image output apparatus according to claim 1.*

As to Claim 31:

- *A program which causes a computer to function as the image output apparatus according to claim 6.*

As to Claim 32:

- *A program which causes a computer to function as the image output apparatus according to claim 13.*

As to Claim 33:

- *A program which causes a computer to function as the image output apparatus according to claim 22.*

As to Claim 34:

- *A program which causes a computer to function as the image output apparatus according to claim 23.*

As to Claim 35:

Art Unit: 4146

- *A program which causes a computer to function as the image output apparatus according to claim 24.*

As to Claim 36:

- *A program which causes a computer to function as the image output apparatus according to claim 25.*

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 6, 7, 11-21, 30-32, & 37-39 are rejected under 35 U.S.C. 102 (b) as being unpatentable by Freeny et al (US # 7,301,664 B2)

As to Claim 1:

An image output apparatus comprising:

- *input element for inputting an image data from a recording medium; Freeny et al. teaches a multiple integrated machine system that is has a floppy disk drive that can be used receive messages and images, See column 9 lines 50-55.*

Art Unit: 4146

- *output element for printing out the image data;* Freeny et al. teaches a “document center” mode which allows for printing functions, See column 7 lines 40-48.
- *temporary storage element for reading non-displayed image data from the recording medium and holding the non-displayed image data in a temporary storage section with holding already-displayed image data;* Freeny et al. teaches a floppy disk, CDROMS, hard drives, tapes, and other storage devices which reads on temporary storage that are capable of holding non-displayed and displayed images together, see column 9 lines 50-55. Freeny explain in column 23 lines 50-62 a back up process on tape that backs up both displayed and non-displayed images.
- *and display element for reading image data from the temporary storage section and displaying the read image data.* Freeny et al. teaches a display that can be used to view image data from temporary storage sections such as hard drives, floppy disks, CDROMS, and other storage devices See column 9 lines 50-55 and column 15 lines 35-38, See also column 23 lines 15-20.

As to claim 6:

An image output apparatus comprising:

Art Unit: 4146

- *input element for inputting an image data from a recording medium;* Freeny et al. teaches a multiple integrated machine system that is has a floppy disk drive that can be used receive messages and images, See column 9 lines 50-55.
- *temporary storage element for holding in a temporary storage section an image data that has been designated to be printed out;* Freeny et al. teaches a floppy disk, CDROMS, hard drives, tapes, and other storage devices which reads on temporary storage that are capable of holding non-displayed and displayed images together, see column 9 lines 50-55. Freeny explain in column 23 lines 50-62 a back up process on tape that backs up both displayed and non-displayed images.
- *and output element for reading the image data from the temporary storage section and printing out the read image data.* Freeny et al. teaches a display that can be used to view image data from temporary storage sections such as hard drives, floppy disks, CDROMS, and other storage devices See column 9 lines 50-55 and column 15 lines 35-38, See also column 23 lines 15-20.

As to Claim 7:

Freeny et al. discloses the limitations as shown in the rejection of claim 6,

An image output apparatus according to claim 6,

Art Unit: 4146

- ***wherein*** when printout is designated from a list display, Freeny teaches a Print Manager mode with has a small display, that is able to open files so that a preview can be seen, this is a reduced image data, which reads on list display, See paragraph 79 and Fig. 6.
- *the temporary storage element reads image data to be printed out from the recording medium in advance before start of a printout process*, Freeny et al. teaches a multiple integrated machine system that is has a floppy disk drive that can be used receive messages and images, See column 9 lines 50-55. Freeny et al teaches that after this image data is read it can be print out. Freeny et al. teaches a “document center” mode which allows for printing functions, See column 7 lines 40-48.
- *and holds the image data in the temporary storage section*. Freeny et al. teaches a floppy disk, CDROMS, hard drives, tapes, and other storage devices which reads on temporary storage that are capable of holding non-displayed and displayed images together, see column 9 lines 50-55.

As to Claim 11:

- *An image display method performed by an image output apparatus that prints out image data read out from a recording medium, comprising:* Freeny et al.

Art Unit: 4146

teaches a method that uses a floppy disk drive that can be used receive messages and images, See column 9 lines 50-55.

- *reading non-displayed image data from the recording medium and holding the non-displayed image data in a temporary storage section with holding already-displayed image data;* Freeny et al. teaches a method that uses floppy disk, CDROMS, hard drives, tapes, and other storage devices which reads on temporary storage that are capable of holding non-displayed and displayed images together, see column 9 lines 50-55. Freeny explain in column 23 lines 50-62 a back up process on tape that backs up both displayed and non-displayed images.
- *and reading an image data from the temporary storage section and displaying the read image data.* . Freeny et al. teaches a method that cab display image data from temporary storage sections such as hard drives, floppy disks, CDROMS, and other storage devices See column 9 lines 50-55 and column 15 lines 35-38, See also column 23 lines 15-20.

As to Claim 12:

- *An image display method performed by an image output apparatus that prints out image data read out from a recording medium, comprising:* Freeny et al. teaches a multiple integrated machine system that is has a floppy disk drive that can be used receive messages and images, See column 9 lines 50-55.
- *holding in a temporary storage section image data that is designated to be printed out;* Freeny et al. teaches a method that is capable of using a floppy disk, CDROMS, hard drives, tapes, and other storage devices which reads on temporary storage that are capable of holding non-displayed and displayed images together, see column 9 lines 50-55. Freeny explain in column 23 lines 50-62 a back up process on tape that backs up both displayed and non-displayed images.
- *and reading the image data from the temporary storage section and printing out the read image data.* Freeny et al. teaches a display that can be used to view image data from temporary storage sections such as hard drives, floppy disks, CDROMS, and other storage devices See column 9 lines 50-55 and column 15 lines 35-38, See also column 23 lines 15-20.

As to Claim 13:

Art Unit: 4146

An image output apparatus comprising:

- *input element for inputting an image data from a recording medium;* Freeny et al. teaches a multiple integrated machine system that is has a floppy disk drive that can be used receive messages and images, See column 9 lines 50-55.
- *display condition specifying element for displaying selection items for each display condition and specifying the display condition through selection of a selection item;* Freeny teaches that his multiple integrated machine system has a display condition specifying element, which controls items that can be seen, See column 21 and lines 42-45 and lines 50-53.
- *display element for displaying the image data based on the display conditions;* Freeny et al. teaches a display that can be used to view image data from temporary storage sections such as hard drives, floppy disks, CDROMS, and other storage devices See column 9 lines 50-55 and column 15 lines 35-38, See also column 23 lines 15-20.
- *and output element for printing out the image data.* Freeny et al. teaches a “document center” mode which allows for printing functions, See column 7 lines 40-48.

As to Claim 14:

Art Unit: 4146

An image output apparatus according to claim 13,

Freeny et al. discloses the limitations as shown in the rejection of claim 13

- ***wherein*** the display condition specifying element displays at least one representative image data matching the display conditions, while relating it to the selection item. Freeny et al teaches display conditions that have representative image data conditions such as Directory and File names, to view the desired files, See column 23 lines 15-19 and Fig 6.

As to Claim 15:

An image output apparatus according to claim 13,

Freeny et al. discloses the limitations as shown in the rejection of claim 13

- ***wherein*** the display condition specifying element displays at least one representative image data matching the display conditions, while relating it to the selection item, and switches the representative image data. Freeny et al teaches display conditions that have representative image data conditions such as Directory and File names, to view the desired files, See column 23 lines 15-19 and Fig 6. Freeny also teaches that the file information will be automatically displayed, See column 23 lines 28-31.

As to Claim 16:

An image output apparatus according to claim 13,

Freeny et al. discloses the limitations as shown in the rejection of claim 13

- ***wherein*** the display condition specifying element displays information regarding the image data matching the display conditions, while relating it to the selection item. Freeny et al teaches display conditions that have representative image data conditions such as Directory and File names, to view the desired files, See column 23 lines 15-19 and Fig 6. Freeny also teaches that the file information will be automatically displayed; See column 23 lines 28-31.

As to Claim 17:

An image output apparatus according to claim 13,

Freeny et al. discloses the limitations as shown in the rejection of claim 13

- ***wherein*** the display conditions include at least one of date, year, month, week, time of photographing or creation of the image data. Freeny et al. teaches that his image output apparatus uses a predetermined Graphical User Interface program such as MS Word. MS Word has the display conditions that include date, year, month, week, and time of photographing or creation of image data,

Art Unit: 4146

See column 21 lines 49-55.

As to claim 18:

An image output apparatus according to claim 13,

Freeny et al. discloses the limitations as shown in the rejection of claim 13

- ***wherein*** the selection items are displayed on a calendar Freeny et al. teaches that his image output apparatus uses a predetermined Graphical User Interface program such as MS Word. MS Word also as the capability of the calendar feature, See column 21 lines 49-55.

As to Claim 19:

An image display method performed by an image output apparatus that prints out image data read out from a recording medium, comprising: Freeny et al. teaches a multiple integrated machine system that is has a floppy disk drive that can be used receive messages and images, See column 9 lines 50-55. Freeny et al. teaches a “document center” mode which allows for printing Functions, See column 7 lines 40-48.

- (a) *displaying selection items for each display condition and specifying the display condition through selection of a selection item;* Freeny teaches that his

Art Unit: 4146

multiple integrated machine system has a display condition specifying element, which controls items that can be seen, See column 21 and lines 42-45 and lines 50-53.

- *and (b) displaying the image data based on the display conditions.* Freeny et al. teaches a display that can be used to view image data from temporary storage sections such as hard drives, floppy disks, CDROMS, and other storage devices See column 9 lines 50-55 and column 15 lines 35-38, See also column 23 lines 15-20.

As to Claim 20:

An image display method according to claim 19,

- ***wherein*** the step (a) displays at least one representative image data matching the display conditions, while relating it to the selection item. Freeny et al teaches display conditions that have representative image data conditions such as Directory and File names, to view the desired files, See column 23 lines 15-19 and Fig 6.

As to Claim 21:

An image display method according to claim 19,

Freeny et al. discloses the limitations as shown in the rejection of claim 19

Art Unit: 4146

- ***wherein*** the step (a) displays at least one representative image data matching the display conditions, while relating it to the selection item, and switches the representative image data. Freeny et al teaches display conditions that have representative image data conditions such as Directory and File names, to view the desired files, See column 23 lines 15-19 and Fig 6. Freeny also teaches that the file information will be automatically displayed, See column 23 lines 28-31.

As to Claim 30:

- *A program which causes a computer to function as the image output apparatus according to claim 1.* See Freeny et al. column 15 lines 5-10.

As to Claim 31:

- *A program which causes a computer to function as the image output apparatus according to claim 6.* See Freeny et al. column 15 lines 5-10

As to Claim 32:

- *A program which causes a computer to function as the image output apparatus according to claim 13.* See Freeny et al. column 15 lines 5-10

As to Claim 37:

Art Unit: 4146

- *A recording medium on which is recorded a program which causes a computer to function as the image output apparatus according to claim 1. See Freeny et al. column 15 lines 5-10*

As to Claim 38:

- *A recording medium on which is recorded a program which causes a computer to function as the image output apparatus according to claim 6. See Freeny et al. column 15 lines 5-10*

As to Claim 39:

- *A recording medium on which is recorded a program which causes a computer to function as the image output apparatus according to claim 13. See Freeny et al. column 15 lines 5-10*

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 4146

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claim 2, 3, & 8 are rejected under U.S.C. 103(a) as being unpatentable over Freeny et al (US # 7,301,664 B2) in view of Ishii et al. (US # 5,598,279)

As to Claim 2:

An image output apparatus according to claim 1,

Freeny et al. discloses the limitations as shown in the rejection of claim 1,

Freeny et al. discloses the limitations of the following limitation of the claim:

- ***wherein*** the temporary storage element holds the image data in the temporary storage section Freeny et al. teaches a floppy disk, CDROMS, hard drives, tapes, and other storage devices which reads on temporary storage that are capable of holding non-displayed and displayed images together, see column 9 lines 50-55.

Freeny et al. remains silent on the following limitation of the claim:

Art Unit: 4146

- *or deletes the image data from the temporary storage section, according to an order of priority and a predetermined limitation.*

However, Ishii et al. teaches an apparatus with an automatic deletion data feature. Ishii teaches that this feature is an excellent feature because it allows the “deleting of particular data automatically” to accommodate new data, Ishii feature helps a system to use limited memory capacity efficiently, See column 1 lines 57-58. Ishii also teaches that his apparatus can be given the term for presenting data or the data for deleting them can be designated, data of the kind which will become needless soon can be discarded efficiently; See column 14 lines 57-67. **It would have been obvious to one of ordinary skill in the art to combine**, Freeny et al. Multiple Integrated Machine in view of Ishii et al automatic deletion data feature, because it would enable limited memory systems to work efficiently and eliminate unwanted data from being stored on the multiple integrated machine. Ishii feature allows for an “order of priority” to be set, so that unwanted data can be deleted. Combining Freeny in view of Ishii would ensure that the limitations listed above would be met.

As to Claim 3:

An image output apparatus according to claim 2,

Freeny et al. in view of Ishii et al. discloses the limitations as shown in the rejection of claim 2,

Freeny et al. remains silent on the following limitation of the claim:

- ***wherein** the priority order of non-displayed image data for the next display screen is set higher than those of other non-displayed image data.*

However, Ishii et al. teaches an apparatus with an automatic deletion data feature. Ishii teaches that this feature is an excellent feature because it allows the “deleting of particular data automatically” to accommodate new data, Ishii feature helps a system to use limited memory capacity efficiently, See column 1 lines 57-58. Ishii also teaches that his apparatus can be given the term for presenting data or the data for deleting them can be designated, data of the kind which will become needless soon can be discarded efficiently; See column 14 lines 57-67. **It would have been obvious to one of ordinary skill in the art to combine**, Freeny et al. Multiple Integrated Machine in view of Ishii et al automatic deletion data feature, because it would enable limited memory systems to work efficiently and eliminate unwanted data from being stored on the multiple integrated machine. Ishii feature allows for an “order of priority” to be set, so that unwanted data can be deleted. Combining Freeny in view of Ishii would ensure that the limitations listed above would be met.

As to Claim 8:

An image output apparatus according to claim 6,

Freeny et al. discloses the limitations as shown in the rejection of claim 6,

Freeny et al. discloses the limitations of the following limitation of the claim:

- *wherein the temporary storage element holds the image data in the temporary storage section* Freeny et al. teaches a floppy disk, CDROMS, hard drives, tapes, and other storage devices which reads on temporary storage that are capable of holding non-displayed and displayed images together, see column 9 lines 50-55.

Freeny et al. remains silent on the following limitation of the claim:

- *or deletes the image data from the temporary storage section, according to a predetermined limitation.*

However, Ishii et al. teaches an apparatus with an automatic deletion data feature.

Ishii teaches that this feature is an excellent feature because it allows the “deleting of particular data automatically” to accommodate new data, Ishii feature helps a system to use limited memory capacity efficiently, See column 1 lines 57-58. Ishii also teaches that his apparatus can be given the term for presenting data or the data for deleting them can be designated, data of the kind which will become needless soon can be discarded efficiently; See column 14 lines 57-67. **It would have been obvious to one of ordinary skill in the art to combine,** Freeny et al. Multiple Integrated Machine in view of Ishii et al automatic deletion data feature, because it would enable limited memory systems to work efficiently and eliminate unwanted data from being stored on the multiple integrated machine. Ishii feature allows for an “order of priority”

Art Unit: 4146

to be set, so that unwanted data can be deleted. Combining Freeny in view of Ishii would ensure that the limitations listed above would be met.

12. Claim 4, 5, & 9 are rejected under U.S.C. 103(a) as being unpatentable over Freeny et al (US # 7,301,664 B2) in view of Ishii et al. (US # 5,598,279) in further view of Tanimoto (US # 2005/0063001)

As to Claim 4:

An image output apparatus according to claim 2,

Freeny et al. in view of Ishii et al. discloses the limitations as shown in the rejection of claim 2,

Freeny et al. in view of Ishii et al. remains silent on the following limitation of the claim:

- ***wherein*** the priority order of non-displayed detailed image data or non-displayed simplified image data corresponding to a selected already-displayed image data or an already-displayed image data in the vicinity thereof is set higher than those of other non-displayed image data.

However, Tanimoto teaches a printing control method that set priorities on the delete list. Tanimoto teaches that this list is based on a variety of factors such as data size,

Art Unit: 4146

use time, use of frequency, and data size, See paragraph 16 and Fig. 3. **It would have been obvious to one of ordinary skill in the art to combine, Freeny et al's Multiple Integrated Machine in view of Ishii et al automatic deletion data feature in further view of Tanimoto's Image Processing Control Method** because it would allow the user the ability to set up priorities on which material needed to be deleted in order to efficiently use memory. Tanimoto teaches the use of frequency can be set to create a delete priority. Use of Frequency, determines whether a image has been displayed or not displayed. Combining Freeny in view of Ishii and in further view of Tanimoto would ensure that the limitations listed above would be met.

As to Claim 5:

An image output apparatus according to claim 2,

Freeny et al. in view of Ishii et al. discloses the limitations as shown in the rejection of claim 2,

Freeny et al. in view of Ishii et al. remains silent on the following limitation of the claim:

- ***wherein*** the predetermined limitation is set by specifying at least one of the maximum holding number of already-displayed image data or non-displayed image data and the maximum storage amount.

Art Unit: 4146

However, Tanimoto teaches a printing control method that set priorities on the delete list. Tanimoto teaches that this list is based on a variety of factors such as data size, use time, use of frequency, and data size, See paragraph 16 and Fig. 3. **It would have been obvious to one of ordinary skill in the art to combine**, Freeny et al's Multiple Integrated Machine in view of Ishii et al automatic deletion data feature and in further view of Tanimoto's Image Processing Control Method because it would allow the user the ability to set up priorities on which material needed to be deleted in order to efficiently use memory. Tanimoto teaches the use of frequency can be set to create a delete priority. Use of Frequency, determines whether a image has been displayed or not displayed. Tanimoto teaches that the priority of the delete list can also be set by the data size of the printing data, which is determined by comparing to how much memory is free, See paragraph 8 and Fig.5 S104 & S105. Combining Freeny in view of Ishii and in further view of Tanimoto would ensure that the limitations listed above would be met.

As to Claim 9:

An image output apparatus according to claim 8,

Freeny et al. discloses the limitations as shown in the rejection of claim 8,

Freeny et al. in view of Ishii et al. remains silent on the following limitation of the claim:

Art Unit: 4146

- *wherein the predetermined limitation is set by specifying at least one of the maximum holding number of image data and the maximum storage amount.*

However, Tanimoto teaches a printing control method that set priorities on the delete list. Tanimoto teaches that this list is based on a variety of factors such as data size, use time, use of frequency, and data size, See paragraph 16 and Fig. 3. **It would have been obvious to one of ordinary skill in the art to combine**, Freeny et al's Multiple Integrated Machine in view of Ishii et al automatic deletion data feature and in further view of Tanimoto's Image Processing Control Method because it would allow the user the ability to set up priorities on which material needed to be deleted in order to efficiently use memory. Tanimoto teaches that the priority of the delete list can also be set by the data size of the printing data, which is determined by comparing to how much memory is free, See paragraph 8 and Fig.5 S104 & S105. Combining Freeny in view of Ishii and in further view of Tanimoto would ensure that the limitations listed above would be met.

13. Claim 10 is rejected under U.S.C. 103(a) as being unpatentable over Freeny et al (US # 7,301,664 B2) in view of Ishii et al (US # 5, 598,279) in further view of Tanimoto (US # 2005/0063001) in further view of Wanda et al (US # 2005/0128514)

As to Claim 10:

An image output apparatus according to claim 8,

Art Unit: 4146

Freeny et al. discloses the limitations as shown in the rejection of claim 8,

Freeny et al. in view of Ishii et al. remains silent on the following limitation of the claim:

- ***wherein** the predetermined limitation is calculated on the basis of the capacity of the temporary storage section or the number of the printing devices.*

However, Tanimoto teaches a printing control method that set priorities on the delete list. Tanimoto teaches that this list is based on a variety of factors such as data size, use time, use of frequency, and data size, See paragraph 16 and Fig. 3. Wanda et al. teaches a Print Job Management Method which set priority print jobs based on the number of print devices. Wanda teaches that his system can contain a plurality of printers and if one is not working properly, its print queue will transfer to another printer, See Paragraph 8. **It would have been obvious to one of ordinary skill in the art to combine, Freeny et al's** Multiple Integrated Machine in view of **Ishii et al** automatic deletion data feature and in further view of **Tanimoto's** Image Processing Control Method in further view of **Wanda et al.** because it would allow the user the ability to set up priorities on which material needed to be deleted in order to efficiently use memory and also ensure the system would work seamlessly in the cases that one the systems printers where down. Tanimoto teaches that the priority of the delete list can also be set by the data size of the printing data, which is determined by comparing to how much memory is free, See paragraph 8 and Fig.5 S104 & S105. Wanda method considers

Art Unit: 4146

the number of the printers in the system and deletes the print queue from a printer that is not functional or that is low on toner; and transfers the job to another printer, See paragraph 65. Combining Freeny in view of Ishii and in further view of Tanimoto would ensure that the limitations listed above would be met.

14. Claims 22, 23, 24, 27, 33-35, & 40-42 are rejected under U.S.C. 103(a) as being unpatentable over Freeny et al (US # 7,301,664 B2) in view of Wanda et al (US # 2005/0128514)

As to Claim 22:

An image output apparatus comprising:

Freeny et al. discloses the limitations of the following limitation of the claim:

- *input element for inputting image data;* Freeny et al. teaches a multiple integrated machine system that is has a floppy disk drive that can be used receive messages and images, See column 9 lines 50-55.

Freeny et al. remains silent on the following limitation of the claim:

- *printing element for printing out image data using a plurality of printing devices;*
- *and assigning element for assigning the image data to the plurality of printing devices,*

- *where the assigning element preferentially assigns the image data to be printed to the printing device that has printed out the least number of image data.*

However, Wanda et al teaches a Print Job Management Method that uses a printer server to assign print jobs to a plurality of printing devices, See paragraph 7. Wanda also teaches that his method takes into consideration the amount of toner in each printer. In the case one printer is running low on toner, the method will send the job to another printer, which has printer fewer image data, and has more toner. **It would have been obvious to one of ordinary skill in the art to combine**, Freeny et al in view of Wanda et al. because combining the two invention would ensure a Multiple integrated machine that would more provided customers with more printing options. Combining Freeny in view of Wanda would ensure that the above named limitations would be met.

As to Claim 23:

An image output apparatus comprising:

Freeny et al. discloses the limitations of the following limitation of the claim:

- *input element for inputting image data;* Freeny et al. teaches a multiple integrated machine system that is has a floppy disk drive that can be used receive messages and images, See column 9 lines 50-55.

Art Unit: 4146

Freeny et al. remains silent on the following limitation of the claim:

- *printing element for printing out image data using a plurality of printing devices;*
- *and assigning element for assigning the image data to the plurality of printing devices,*
- *where the assigning element assigns the same image data to the same printing device.*

However, Wanda et al teaches a Print Job Management Method that uses a printer server to assign print jobs to a plurality of printing devices, See paragraph 7. Wanda also teaches that his method teaches a primary and secondary printer. The secondary printer acts as a backup, in the case that the primary falls according to Fig 7. The primary would be spooled the all the jobs, except for the case of a failure, See Fig 7. **It would have been obvious to one of ordinary skill in the art to combine,** Freeny et al in view of Wanda et al. because combining the two invention would ensure a Multiple integrated machine that would more provided customers with more printing options. Combining Freeny in view of Wanda would ensure that the above named limitations would be met.

As to Claim 24:

An image output apparatus comprising:

Art Unit: 4146

Freeny et al. discloses the limitations of the following limitation of the claim:

- *input element for inputting image data; Freeny et al. teaches a multiple integrated machine system that is has a floppy disk drive that can be used receive messages and images, See column 9 lines 50-55.*

Freeny et al. remains silent on the following limitation of the claim:

- *printing element for printing out the image data using a plurality of printing devices;*
- *and assigning element for assigning the image data to the plurality of printing devices,*
- *where the assigning element assigns a smaller percentage of image data to a certain printing device than to other printing devices.*

However, Wanda et al teaches a Print Job Management Method that uses a printer server to assign print jobs to a plurality of printing devices, See paragraph 7. Wanda also teaches that his method teaches a primary and secondary printer. The secondary printer acts as a backup, in the case that the primary falls according to Fig 7. The primary would be spooled the all the jobs, except for the case of a failure, See Fig 7. This would mean that printer 1 is assigned a larger percentage of image data than

Art Unit: 4146

printer 2. **It would have been obvious to one of ordinary skill in the art to combine,** Freeny et al in view of Wanda et al. because combining the two invention would ensure a Multiple integrated machine that would more provided customers with more printing options. Combining Freeny in view of Wanda would ensure that the above named limitations would be met.

As to Claim 27:

An image output method performed by an image output apparatus that prints out inputted image data, comprising:

Wanda et al. discloses the limitations of the following limitation of the claim:

- *printing out image data using a plurality of printing devices; assigning the image data to the plurality of printing devices; Wanda et al teaches a Print Job Management Method that uses a printer server to assign print jobs to a plurality of printing devices, See paragraph 7.*

Ishii et al. remains silent on the following limitation of the claim:

- *and conveying printed items to a predetermined removal opening among removal openings provided for respective printing devices.*

Art Unit: 4146

However, Ishii et al teaches a "Sorter C" that has several bins (See Fig.1 111a-111x), which reads on removal openings. Ishii also teaches that there are rollers that feed the printed material to the appropriate bins or removal openings see column 6 lines 30-37 and Fig 1. **It would have been obvious to one of ordinary skill in the art to combine**, Wanda et al. in view of Ishii et al. because combining these inventions would ensure a multiple integrated machine that would provide customers with more printing options and the ability to organize the output print jobs. Combining Wanda et al. in view Ishii et al. would ensure that the above named limitations would be met.

As to Claim 33:

- *A program which causes a computer to function as the image output apparatus according to claim 22. See Freeny et al. column 15 lines 5-10.*

As to Claim 34:

- *A program which causes a computer to function as the image output apparatus according to claim 23. See Freeny et al. column 15 lines 5-10.*

As to Claim 35:

- *A program which causes a computer to function as the image output apparatus according to claim 24. See Freeny et al. column 15 lines 5-10.*

As to Claim 40:

- *A recording medium on which is recorded a program which causes a computer to function as the image output apparatus according to claim 22. See Freeny et al. column 15 lines 5-10.*

Art Unit: 4146

As to Claim 41:

- *A recording medium on which is recorded a program which causes a computer to function as the image output apparatus according to claim 23. See Freeny et al. column 15 lines 5-10.*

As to Claim 42:

- *A recording medium on which is recorded a program which causes a computer to function as the image output apparatus according to claim 24. See Freeny et al. column 15 lines 5-10.*

15. Claims 25, 36, 43 are rejected under U.S.C. 103(a) as being unpatentable over Freeny et al (US # 7,301,664 B2) in view of Ishii et al (US # 5,598,279) and in further view of Wanda et al (US # 2005/0128514)

As to Claim 25:

An image output apparatus comprising:

Freeny et al. discloses the limitations of the following limitation of the claim:

- *input element for inputting image data; Freeny et al. teaches a multiple integrated machine system that is has a floppy disk drive that can be used receive messages and images, See column 9 lines 50-55.*

Freeny et al. remains silent on the following limitation of the claim:

Art Unit: 4146

- *printing element for printing out the image data using a plurality of printing devices;*
- *assigning element for assigning the image data to the plurality of printing element;*
- *a plurality of removal openings corresponding to the printing devices;*
- *and a printed item conveying device for conveying printed items to a predetermined removal opening.*

However, Ishii et al teaches a "Sorter C" that has several bins (See Fig.1 111a-111x), which reads on removal openings. Ishii also teaches that there are rollers that feed the printed material to the appropriate bins or removal openings see column 6 lines 30-37 and Fig 1. Wanda et al teaches a Print Job Management Method that uses a printer server to assign print jobs to a plurality of printing devices, See paragraph 7. Wanda also teaches that his method teaches a primary and secondary printer. The secondary printer acts as a backup, in the case that the primary falls according to Fig 7. The primary would be spooled the all the jobs, except for the case of a failure, See Fig 7. This would mean that printer 1 is assigned a larger percentage of image data than printer 2. **It would have been obvious to one of ordinary skill in the art to combine**, Freeny et al in view of Ishii and in further view of Wanda et al. because

Art Unit: 4146

combining the three inventions would ensure a multiple integrated machine that would provide customers with more printing options and the ability to organize the output print jobs. Combining Freeny et al. in view Ishii et al. in further view of Wanda et al. would ensure that the above named limitations would be met.

As to Claim 36:

- *A program which causes a computer to function as the image output apparatus according to claim 25. See Freeny et al. column 15 lines 5-10.*

As to Claim 43:

- *A recording medium on which is recorded a program which causes a computer to function as the image output apparatus according to claim 25. See Freeny et al. column 15 lines 5-10.*

16. Claim 26 is rejected under U.S.C. 103(a) as being unpatentable over Freeny et al (US # 7,301,664 B2) in view Ishii et al (US # 5,598,279) in further view of Wanda et al (US # 2005/0128514) and in further view of Kuo (US # 5,513,013)

As to Claim 26:

An image output apparatus according to claim 25,

Freeny et al. in view of Ishii et al. and in further view of Wanda et al. discloses the limitations as shown in the rejection of claim 25,

Art Unit: 4146

Freeny et al. in view of Ishii et al. and in further view of Wanda et al remain silent of the following limitation

- *further comprising removal-opening open close element for opening an open and close flap of the predetermined removal opening and closing those of all other removal openings.*

However, Kuo teaches a Facsimile output job sorting unit that is capable of closing all bins or flaps so that all the output will exit out on open flap, or bin, See Fig 8 and see column 21 lines 40-45 **It would have been obvious to one of ordinary skill in the art to combine,** Freeny et al in view of Ishii and in further view of Wanda et al. in further view of Kuo because combining the three inventions would ensure a multiple integrated machine that would provide customers with more printing options and the ability to organize the output print jobs. Combining Freeny et al. in view Ishii et al. in further view of Wanda et al. and in further view of Kuo would ensure that the above named limitations would be met.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is Miyamoto's Image Processing Control Method and Apparatus US # 5,734,482.

Art Unit: 4146

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUNIL CHACKO whose telephone number is (571)270-7221. The examiner can normally be reached on 8 to 5 Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ramesh Patel can be reached on 571-272-3688. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SUNIL CHACKO
Examiner
Art Unit 4146

/Ramesh B. Patel/
Supervisory Patent Examiner, Art Unit 4146
571-272-3688